

ABSTRACT

A method for detecting line under voltage (LUV) events and initializing load shedding of loads located near the electrical disturbance without customer and utility intervention. In one example embodiment, the LUV detection system samples a primary voltage source at regular time intervals, thereby generating a series of voltage readings, and compares the voltage readings to an under voltage trigger threshold. If an under voltage condition is detected, then an under voltage in-response cycle is initialized that controls the electrical load. When the voltage readings decrease to below a voltage-power fail level, a plurality of load restore counter values are stored in memory before the load is shed from the primary voltage source. A restore response is then initialized after the voltage level rises above a restore value and is maintained above the restore value for an under voltage out-time period.